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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/885,877	06/20/2001	David S. Teppo	STE01 P-1097	4510

277 7590 05/22/2003

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EXAMINER

HARRIS, STEPHANIE N

ART UNIT PAPER NUMBER

3636

DATE MAILED: 05/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/885,877

Applicant(s)

TEPPO ET AL.

Examiner

Stephanie N. Harris

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 16-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 16-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1, 2, and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Johnson (USPN 5314235).

Regarding claim 1, Johnson discloses a back construction for a seating unit comprising a flexible back panel (10) configured to support a seated user's torso and a bladder (24) attached to the flexible back panel so that when the bladder expands in one direction and simultaneously shortens in a different direction (Col.3, lines 13-24). The back panel is flexed to a different shape (Col. 3, lines 13-17).

Regarding claim 2, the bladder (24) is elongated as seen in Figure 1. It is inherent that, when the bladder expands in one direction and simultaneously shortens in a different direction, that the different direction will extend parallel to a length of the elongated bladder (Col.3, lines 13-24).

Regarding claim 3, the direction of the bladder is parallel to the thickness direction of the bladder when it expands, since the bladder is one uniform shape.

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 5, 6, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Ishida et al. (USPN 4807931).

Johnson shows all of the teachings of the claimed invention but fails to show the use of a bladder that includes multiple pleats and whose length extends in a vertical direction.

Regarding claim 4, Ishida et al. discloses a bladder (28) whose length extends in a vertical direction as seen in Figure 2. Regarding claim 5, the bladder includes multiple pleats (40,41) that extend in a direction perpendicular to the different direction that occurs when the bladder expands in one direction and simultaneously shortens in a different direction (Col. 2, lines 48-62). Regarding claim 6, the pleats (40,41) extend horizontally as seen in Figure 2.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the bladder of Johnson with the a bladder that includes multiple pleats and whose length extends in a vertical direction, as shown by Ishida et al., in order to allow for even expansion of the bladder.

Johnson shows all of the teachings of the claimed invention but also fails to show the use of an air pump that is operably connected to a bladder. Regarding claim 19, Ishida et al. discloses the use of an air pump (34) that is operably connected to a bladder (28) (Col 2, lines 46-47). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the bladder of Johnson with the air pump, as shown by Ishida et al., in order to provide an air controlled bladder that is manually accessible to chair occupant.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Gillaspie (USPN 5074286).

Johnson shows all of the teachings of the claimed invention but fails to show the use of a fluid pump that is operably connected to a bladder. Gillaspie discloses the use of a fluid pump that is operably connected to a bladder (Col. 2, lines 35-39). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the bladder of Johnson with the fluid pump, as shown by Gillaspie, in order to provide manual inflation or deflation of the bladder by the occupant of the chair.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Rhodes, Jr. (USPN 6203105).

Johnson shows all of the teachings of the claimed invention but fails to show the use of a bladder that extends vertically from top to bottom of the back shell, but extends only partially horizontally across the back shell.

Regarding claim 11, Rhodes, Jr. discloses a bladder (3,4) that extends vertically from top to bottom of a back shell (2), but extends horizontally across the back shell as seen in Figure 1. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the bladder of Johnson, by replacing it with the bladder that extends vertically from top to bottom of the back shell, but extends only partially horizontally across the back shell, as shown by Rhodes, Jr. in order to provide uniform inflation and deflation of the air bladder.

Claims 1, 8, 9, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson et al. (USPN 6079785) in view of Johnson.

Regarding claim 1, Peterson et al. discloses a back construction for a seating unit comprising a flexible back panel (21) that is configured to support a seated user's torso. The back panel (21) can be flexed to a different shape (Col. 3, lines 59-62). Regarding claim 8, the back panel includes a lumbar section (23) that is flexible (Abstract).

Regarding claim 9, the back panel includes a stiff top section (46) and a stiff bottom section (47) connected together by a lumbar section (23) as seen in Figure 5. Regarding claim 10, the lumbar section includes vertically extending side strips (28) that flex and include horizontally extending strips (49) that extend between the side strips (Col. 3, lines 17-23).

Peterson et al. shows all of the teachings of the claimed invention but fails to show the use of a bladder that is attached to a flexible back panel so that when the

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bladder expands in one direction it simultaneously shortens in a different direction and the back panels is flexed to a different shape. Johnson discloses a the use of a bladder that is attached to a flexible back panel so that when the bladder expands in one direction and simultaneously shortens in a different direction. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the back panel of Peterson et al. by adding a bladder, as shown by Johnson, in order to allow the flexing of the back panel to be varied.

Claims 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson et al. in view of Ishida et al. (USPN 4807931).

Regarding claim 20, Peterson et al. discloses a back construction for a seating unit is comprised of a rigid back frame (39), a flexible back panel (21). The flexible back panel is attached to and supported by the back frame at spaced apart points (Col. 3, lines 45-49). Regarding claim 21, the back panel (21) is slidably attached to the back frame at a bottom location (Col. 3, lines 45-52). Regarding claim 24, the back panel (21) includes a front surface where an energy mechanism can be laid on and against the front surface located by elements 29 and 65 as seen in Figure 3.

Peterson et al. shows all of the teachings of the claimed invention but fails to show the use of a constrictable energy mechanism that can be coupled to a back panel.

Ishida et al. discloses the use of a constrictable energy mechanism (28) that can be coupled to a flexible back panel (30). Regarding claims 20 and 22, Ishida et al. discloses a bladder, that is a constrictable energy mechanism, which can be operably

coupled to a flexible back panel at spaced apart locations so that when the energy mechanism is energized and constricts the back panel can be flexed to a different shape. Regarding claim 23, the bladder (28) includes transverse pleats (40,41) subdividing a length of the bladder into a plurality of sub-compartments as seen in Figure 2.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the back panel of Peterson et al. by adding a bladder, as shown by Ishida et al., in order to allow the flexing of the back panel to be varied.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson et al. in view of Johnson and Heidmann et al. (USPN 6382719).

Peterson et al. in view of Johnson shows all of the teachings of the claimed invention but fails to show the use of a cover assembly that is attached to the back shell.

Regarding claim 15, Heidmann et al. discloses a cover assembly (66) that is attached to the back shell and can incorporate the bladder as seen in Figure 1. The cover assembly (66) has angled side edges extending non-parallel to side edges of the back shell as seen in Figure 1. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the back shell of Peterson et al. in view of Johnson with the cover assembly, as shown by Heidmann et al., in order to provide an aesthetic cover for the back shell.

Claim 16 rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Schrewe et al. (USPN 5758925).

Johnson shows all of the teachings of the claimed invention but fails to show the use of a bladder that is riveted to the back shell. Regarding claim 16, Schrewe et al. discloses a bladder (106) that is riveted to a back shell (103) as seen in Figure 15. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the back shell of Schrewe et al. by adding a bladder that is riveted, as shown by Schrewe et al., in order to provide a more secure means for the attachment between the bladder and the back shell.

Claims 25 and 26 rejected under 35 U.S.C. 103(a) as being unpatentable over Knoblock et al. (USPN 6394546) in view of Ishida et al. (4807931).

Regarding claim 25, Knoblock et al. discloses a shape changeable component for a furniture unit comprising a flexible plastic panel having a curvilinear surface (Col. 15, lines 62-65). The plastic panel can be flexed to a different shape via the lumbar section (Abstract). Regarding claim 26, the plastic panel can be used as seating unit usable for a back of an automobile seat.

Knoblock et al. shows all of the teachings of the claimed invention but fails to show the use of an inflatable member that can be operably attached to a plastic panel

Ishida et al. discloses an inflatable member (28) that can be operably attached to a plastic panel and laid on the curvilinear surface so that when the inflatable member expands in one direction and simultaneously shortens in a different direction. Ishida et

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al discloses the inflatable member (28) that is attached to a backrest (30) (Col. 2, lines 40-42). Regarding claim 26, a back panel is shown that is used in connection with an automobile seat as seen in Figure 2.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the plastic back panel of Knoblock et al. with the inflatable member, as shown by Ishida et al., in order to allow the flexing of the back panel to be varied.

Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Green (USPN 5599219).

Johnson has been described above. Johnson shows all of the teachings of the claimed invention but fails to show the use of a bladder with a nylon structural layer and an elastic urethane layer.

Regarding claims 17 and 18, Green discloses a bladder (55) that includes multiple layers (Col. 3, lines 4-10). It is inherent that a nylon structural layer (60,61) will be flexible but non-stretchable and providing strength (Col. 1, lines 24-29). An elastic urethane layer (58, 59) is flexible and air impermeable to provide an air-receiving cavity (Col. 2, lines 39-46). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the bladder of Johnson by replacing it with the bladder with a nylon structural layer and an elastic urethane layer, as shown by Green, in order to control the form of the inflated bladder.

Response to Arguments

Applicant's arguments filed on March 29, 2003 have been fully considered but they are not persuasive.

In response to Applicant's argument that Johnson does not include a back panel that is flexed to a different shape, the Examiner respectfully disagrees. Johnson '235 states at Col. 3, lines 13-17, that adjusting the inflation of the bladder allows the user to adjust the profile of the back support to correspond to the user's spine. The adjusting of the bladder changes the shape of the back support. It appears to the Examiner that Figures 3 and 4 show the bladder being inflated and deflated which will change the shape of the back panel. Johnson further states that the displacing the bladder vertically relative to the back panel will enable the bladder to accommodate variations in the location of the lumbar (Col. 1, lines 54-61), which changes the shape of the back panel. Applicant has not claimed that the bladder cannot be repositionable, and the fact the bladder is repositionable does not stop the bladder from changing the shape of the back panel.

In response to Applicant's argument that , the bladder is not affixed to the base plate, Johnson states that the bladder is attached to base plate (28) which is , which is a part of the flexible back panel (10) (Col. 2, lines 49-55).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the

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references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Ishida '931 shows a teaching that allows for even expansion of bladders for seats and an air controlled bladder that is manually accessible to the occupant of the chair. Both Johnson and Ishida '931 disclose teachings of bladder that are used with chairs. Applicant is reminded that Ishida '931 was used to modify Johnson, and not as applicant has stated that "there are no reasons to add a flexible back panel to Ishida '931". The Examiner is of the opinion that modification of the Johnson reference with the Ishida '931 reference would result in Applicant's claimed invention as noted in the above rejection.

In response to applicant's argument that "the bladder of Gillaspie '286 is a bladder used for containing a water spray rather than for inflating", a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). The Examiner is of the opinion that a bladder holding liquid will inherently inflate. The teaching Gillaspie shows is the use of a fluid pump that can be used with a bladder.

This modification is intended only for the pump of the bladder of Johnson, and does not extend to the use of the bladder as shown by Gillaspie to be used in a seat back.

In response to Applicant's argument that Rhodes '105 teaches away from applicant's invention as stated in claim 11, the Applicant is respectfully reminded Rhodes has only been used to modify the Johnson reference. The fact that Rhodes discloses a vehicle seat does not teach away from the modification in which it was used for as stated in the above rejection. A vehicle seat includes a back construction for a seating unit.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Johnson has been used to modify Peterson '785 to allow varied flexing of the back panel. Additionally both Peterson and Johnson disclose teachings that are directed to seats with back constructions. The Examiner is of the opinion that modification of the Peterson reference with the Johnson reference would result in Applicant's claimed invention as noted in the above rejection.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by

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combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Ishida has been used to modify Peterson '785 to allow varied flexing of the back panel. Additionally both Peterson and Ishida disclose teachings that are directed to seats with back constructions. The Examiner is of the opinion that modification of the Peterson reference with the Ishida reference would result in Applicant's claimed invention as noted in the above rejection.

.In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Ishida has been used to modify Knoblock '546 to allow varied flexing of the back panel. Additionally both Knoblock and Ishida disclose teachings that are directed to seats with back constructions. The Examiner is of the opinion that modification of the Knoblock reference with the Ishida reference would result in Applicant's claimed invention as noted in the above rejection.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephanie N. Harris whose telephone number is 703-305-1838. The examiner can normally be reached on Monday-Friday from 9am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Cuomo, can be reached on (703) 308-0827. The fax phone number for the organization where this application or proceeding is assigned is 703-305-7687.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

SNH
May 20, 2003


Peter M. Cuomo
Supervisory Patent Examiner
Technology Center 3600